

## Agenda:

**1230-1235** Introductory Remarks and Admin.....**Kelly Hale**

**1235-1310** with Q&A

*Exploring Methods for Providing Instructor Support and Increasing Cognitive Skills in Game-based Training*

PRESENTER: **Jennifer M. Riley, PhD**, SA Technologies, [jennifer@satechnologies.com](mailto:jennifer@satechnologies.com)

**1310-1345** with Q&A

*Method for Designing Squad Overmatch Training for Stress Exposure*

PRESENTER: **Sam Napier, M.S.**, Army Research Laboratory – Human Research Engineering Directorate, [sam.napier@us.army.mil](mailto:sam.napier@us.army.mil); Co-Authors: **Joan Johnston, PhD**, Army Research Laboratory Simulation and Training Technology Center, [joan.johnston@us.army.mil](mailto:joan.johnston@us.army.mil)

**1345-1420** with Q&A

*Future of the USMC LVC Training Environment*

PRESENTER: - **CDR Henry Phillips, PhD**, Naval Air Warfare Center Training Systems Division, [henry.phillips@navy.mil](mailto:henry.phillips@navy.mil)

**1420-1430** Final Admin/Resolutions

**1500-1505** Introductory Remarks and Admin.....**Kelly Hale**

**1505-1540** with Q&A

*Adaptive Training Concept for Combat Information Center Teams*

PRESENTER: **James Pharmer, PhD**, Naval Air Warfare Center Training Systems Division, [james.pharmer@navy.mil](mailto:james.pharmer@navy.mil)

**1540-1615** with Q&A

*Using Human Behavior Modeling to Create More Effective, Scalable and Affordable Training Experiences*

PRESENTER: **Mike van Lent, PhD**, Soar Technology Inc, email address

**1615-1650** with Q&A

*Process for Training Confederates for Experimentation in Complex Domains*

PRESENTER: **Lauren Reinerman-Jones Institute, PhD**, Simulation and Training, University of Central Florida, [lreinerm@ist.ucf.edu](mailto:lreinerm@ist.ucf.edu) ; Co-Authors: **Rebecca Leis, M.S. (in progress)**, Simulation and Training, University of Central Florida, [rleis@ist.ucf.edu](mailto:rleis@ist.ucf.edu)

**1650-1700** Final Admin/Resolutions

## Presentation Summaries

<i>Exploring Methods for Providing Instructor Support and Increasing Cognitive Skills in Game-</i>
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<i>based Training</i>	
Jennifer M. Riley, PhD, SA Technologies	Jennifer Riley is a Principal Research Associate with SA Technologies, Inc. She is a graduate of Mississippi State University, with a PhD in Industrial Engineering with specialization in Human Factors/Cognitive Engineering. Her research has included work in human systems integration, training, and human performance assessment. Currently, she's working on programs to develop measures and models of cognitive readiness, and to develop tools to support instructors in effective use of serious games for training and techniques for enhancing cognitive skills in serious games.
Bottom Line	<p>Experimental results presented investigated the utility of Virtual Environment Situation Awareness Review System (VESARS) during land navigation planning and execution in VBS2 scenario – a game-based training environment. VESARS provides ability to provide prompts/probes and an instructor support interface. Results showed those who received prompting spent more time planning, less teleporting (i.e., having to go back to previous location), yet comparable performance. In a transfer task, less time spent on course for those who received prompting. Trainees reported the prompts were easy to use. Instructors found support interface easy to learn and use.</p> <p>Overall, performance still low across all groups – likely due to experience level (novice), and difficulty of task itself.</p> <p>Future research – examine how prompts impact behavior modification and performance across experience levels.</p>

<i>Method for Designing Squad Overmatch Training for Stress Exposure</i>	
Sam Napier, M.S., Army Research Laboratory – Human Research Engineering Directorate	
Bottom Line	Research to develop a comprehensive training program to build emotional resilience and awareness.

<i>Future of the USMC LVC Training Environment</i>	
CDR Henry Phillips, PhD, Naval Air Warfare Center Training Systems Division	CDR Henry L. Phillips IV is a Naval Aerospace Experimental Psychologist currently assigned to the Naval Air Warfare Center Training Systems Division (NAWCTSD) as the Military Deputy for Research and Technology. He holds a PhD in Industrial/Organizational Psychology with a minor in Statistics, and currently serves as Vice-Chair of the DoD HFE TAG. CDR Phillips has authored or co-authored more than 25 peer-reviewed articles, technical reports, and conference

	presentations in the areas of item response theory, personnel selection, training, instrument development, and analysis of functional magnetic resonance imagery (fMRI) data through tensor decomposition, and was a recipient of the 2013 Admiral Jeremy M. Boorda Award for Outstanding Integration of Analysis and Policy-Making. His callsign is "Goat."
Bottom Line	Future research opportunity identified with I MEF – LVC exercise later this year (August) involving 2000 participants with fielded systems. Three main focus areas to consider as developing experimental plan to evaluate training effectiveness throughout exercise: data security, scenario authoring, performance assessment and AAR. Goal is to develop scenario authoring support, metrics and AAR capabilities to optimize training experience from LVC exercise.

<i>Adaptive Training Concept for Combat Information Center Teams</i>	
Tom Alicia, NAWCTSD	Tom Alicia is a Research Psychologist at the Naval Air Warfare Center Training Systems Division (NAWCTSD) in Orlando, FL. He has been with NAWCTSD for six years investigating a wide variety of training and human factors issues relevant to the Navy and Department of Defense. His primary research interests are sensation and perception, complex information processing, and human-computer interaction within unmanned systems. He is currently pursuing his doctoral degree in Applied and Experimental Human Factors Psychology at the University of Central Florida.
Bottom Line	Study results outlining effectiveness of individual and team adaptive training within LCS combat information center context. Study has examined the impact of an instructor operator station (PATRIOT) on instructor workload – results showed lower reported workload and better recall of trainee performance when using PATRIOT.

<i>Using Human Behavior Modeling to Create More Effective, Scalable and Affordable Training Experiences</i>	
Mike van Lent, PhD, Soar Technology, Inc	Dr. van Lent holds a doctorate in Computer Science from the University of Michigan, as well as a Masters Degree from the University of Tennessee. His expertise lies in applying cognitive science approaches to military problems. Dr. van Lent is a recognized expert in the development of advanced simulation systems for military training. He has participated in the design and development of many immersive training applications including Full Spectrum Warrior, Strategic Social Interaction Modules, Helping our Heroes, ELECT BiLAT, and UrbanSim.

Bottom Line	<p>Presented empirical results from an ongoing study examining the effectiveness of a computational assessment of social and pedagogical values of system behaviors within an adaptive training system focused on cross-cultural social competency training scenario. Integration of episodic memory component (evaluating recency and frequency of choices) that can impact future adaptations to drive pedagogic values presented participants with higher social and pedagogic value situations compared to no episodic filtering.</p> <p>Discussion – high likelihood of dynamic nature of events that may impact both social and pedagogical values across multiple events.</p>

<i>Process for Training Confederates for Experimentation in Complex Domains</i>	
Lauren Reinerman-Jones Institute, PhD, Simulation and Training, University of Central Florida	<p>Dr. Lauren Reinerman-Jones is a Research Professor at the Institute for Simulation and Training at the University of Central Florida where she conducts research for the United States Army, Air Force, and Navy, and leads the Nuclear Regulatory Commission's Human Performance Test Facility. Her research centers on using physiological measures for improving human performance. She also is a business owner and the CEO of DUJO, which provides research software and a personnel placement and advancement service. She is internationally recognized in her publications and serves on the editorial board for Theoretical Issues in Ergonomics Science.</p>
Bottom Line	<p>Value in capturing data on study confederates, who have been exposed to extensive training to reach performance criterion prior to participating in team-based scenario. Offers comparison data to novice participants – have a second group of 'experienced' participants. Challenges in scheduling and data analysis – researchers must ensure proper statistical evaluations are undertaken. Recommendations for use of confederates was outlined.</p>

**Issues and Concerns (If none exist, state none)**

Title of Concern or Problem	Advocate or Organization That Raised Issue	Group Discussion Summary Related to Topic	Actions, if any to be taken
None			

**Elections (If none held state none)**

Position Being Filled	Current Person	Current Agency/Organization	Candidates Nominated (Name/Agency-Organization)	Final Sub TAG Selection (Based on Voting)
None				

**\*\*\*Please also provide the new individuals contact information\*\*\***

**Open Actions (If none exist state none)**

Title of Concern or Problem	Advocate or Organization That Raised Issue	Group Discussion Summary Related to Topic	Actions, if any to be taken
None			